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09/606,885	06/29/2000	Yuji Kuroda	SONY-T0850	7213

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT PAPER NUMBER

2653

21

DATE MAILED: 07/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/606,885

Applicant(s)

KURODA ET AL.

Examiner

Aristotelis M Psitos

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- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-17,19-32 and 34-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) all is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Applicants' response of 6/16/03 has been considered with the following results.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 1 and 5-16 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure, which is not enabling. In particular, the impinging of the light upon the record medium as recited in the claims and as argued in the latest communication from applicants is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). It is noted that the desired (intended use) ability does not follow from the structure/elements positively recited in the claim and hence fails to satisfy the above requirement.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 5-8, 10 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 11-126387.

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These claims are drawn to an optical recording medium, a record. The claim concludes in a wherein clause which the examiner has interpreted as intended use and NO PATENTABLE WEIGHT is given to such.

Applicants' attention is drawn the disclosure with respect to figures 1, 10 and 11 in the accompanying MAT (machine assisted translation).

With respect to the limitations of claims 5-8, because the limitations of claim 8 are met, the preceding limitations, i.e., parent claims 5-7 are met as stated in the previous OA. Since the recording material is a mo type, the limitations of claim 15 are met, as is the metal limitation of claim 10.

Response to Arguments

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the ability of the light exposing the recording layer as recited in the wherein clause) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 as stated above, and further in view of Yoshinari et al.

The limitation of these claims, plurality of layers for the film is considered to be taught by the Yoshinari et al reference – see figure 3 and its description for instance.

It would have been obvious to one of ordinary skill in the art to modify the system of the prior art as relied upon with respect to the independent claims with the teaching from Yoshinari et al, motivation is to increase the heat dissipation/radiation ability by substituting/ modifying the single layer with a plurality of layers as taught by Yoshinari et al.

6. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 as stated above and further in view of Kikuchi et al.

The ability of having antireflection layers for their inherent use in this environment is known as taught by the Kikuchi et al reference.

It would have been obvious to one of ordinary skill in the art to modify the system of the JP document as relied upon as stated above with the teaching from Kikuchi et al, motivation is to save valuable resources by using existing antireflection layer abilities in this environment for their inherent uses.

7. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 as stated above, and further in view of the acknowledged prior art figure 3.

The ability of having a phase changing recording material and the second protective material as recited in claim 13 is acknowledged by applicants with respect to figure 3.

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It would have been obvious to modify the base system of the JP document to

a) provide for a second protective layer, motivation is to protect the recording layer

b) provide for a phase changing recording layer in lieu of the mo-recording layer noted in the JP document. Selection of one type of recording ability with another is considered a substitution of equivalents and obvious to those of ordinary skill in the art predicated upon cost, availability, ease of manufacturing etc.

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 as stated above, and further in view of the admitted prior art or Maro et al.

As far as the examiner concludes/interprets from the disclosure, the ability of using a dye as the recording material is merely a selection of equivalent recording layers. No unexpected results are seen to occur from selecting a recording layer using dyes as opposed to phase change type as opposed to mo type.

Alternatively, Maro et al discloses such alternative recording materials in this environment.

It would have been obvious to one of ordinary skill in the art to modify the system of the art as relied upon with respect to the claim as stated above with the teaching from the admitted prior art or Maro et al, motivation is to increase the flexibility of the system by using alternative equivalent recording layers as available.

9. Claims 17, 21-25, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 11-126387.

These claims are drawn to an optical recording/reproducing system comprising of the standard elements of a light source, and an optical system for focusing the light to the record medium from the appropriate side as recited.

The JP document discloses such.

Response to Arguments

Applicant's arguments filed on 6/16/03 have been fully considered but they are not persuasive. Applicants' arguments cannot be reconciled with the disclosure as found in the MAT with respect to the operation of the system in this document. Note for instance paragraph 27.

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Dependent claims 21-25 and 30 are duplicative of the limitations of claims 5-8, 10 and 15 and fall for the reasons stated above with respect to those dependent claims.

10. Claims 19 and 20 are rejected under 35 USC 103 (a) as being obvious over the art as applied to claim 17 above further considered with the acknowledged prior art.

Claims 19 & 20 refer to the use of a SIL and the separation between the optical system and the protective layer.

These limitations have been acknowledged by applicants as being part of the prior art – see the description thereof on pages 1 & 2 of the disclosure. Applicants' cooperation in further identifying such is respectfully requested.

It would have been obvious to modify the base system of the JP document with the above noted acknowledged prior art, motivation is to provide for the super resolution recording ability disclosed in the JP document by the acknowledged sil optical systems and hence save valuable resources by not having to create alternative optics to permit such super resolution recording.

11. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 17 as stated above, and further in view of Yoshinari et al.

The limitation of these claims, plurality of layers for the film is considered to be taught by the Yoshinari et al reference – see figure 3 and its description for instance.

It would have been obvious to one of ordinary skill in the art to modify the system of the prior art as relied upon with respect to the independent claims with the teaching from Yoshinari et al, motivation is to increase the heat dissipation/radiation ability by substituting/ modifying the single layer with a plurality of layers as taught by Yoshinari et al.

12. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 17 as stated above and further in view of Kikuchi et al.

The ability of having antireflection layers for their inherent use in this environment is known as taught by the Kikuchi et al reference.

It would have been obvious to one of ordinary skill in the art to modify the system of the JP document as relied upon as stated above with the teaching from Kikuchi et al, motivation is to save

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valuable resources by using existing antireflection layer abilities in this environment for their inherent uses.

13. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 17 as stated above, and further in view of the acknowledged prior art figure 3.

The ability of having a second protective material as recited in claim 13 is acknowledged by applicants with respect to figure 3.

It would have been obvious to modify the base system of the JP document and provide for a second protective layer, motivation is to protect the recording layer.

14. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 17 as stated above, and further in view of the admitted prior art/Maro et al.

As far as the examiner concludes/interprets from the disclosure, the ability of using a dye as the recording material is merely a selection of equivalent recording layers. No unexpected results are seen to occur from selecting a recording layer using dyes as opposed to phase change type as opposed to mo type.

Alternative, Maro et al discloses such alternative recording compositions.

It would have been obvious to one of ordinary skill in the art to modify the system of the art as relied upon with respect to the claims as stated above with the teaching from the admitted prior art/Maro et al, motivation is to increase the flexibility of the system by using alternative equivalent recording layers as available.

15. Claims 32,36-39,41 and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Maro et al.

Maro et al discloses an optical recording/reproducing system using an optical record medium. Note that this system is drawn to the "near" field type and hence the SIL is present. Furthermore, as noted in Maro et al various types of recording layers including a phase changing type is disclosed.

With respect to claims 36-39, since the diamond like carbon limitation of claim 39 is present, the limitations of claims 36-38 – parent claim of claim 39 must inherently be present.

The reflective material limitation of claim 41 is present.

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The second protective layer limitation of claim 44 is also present.

16. Claims 34 and 35 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Maro et al.

With respect to the limitations of these claims, although the Maro et al reference does disclose the "near" field environment as well as the SIL presence, the particular range of claim 34 is not specified. Nevertheless, the examiner concludes that such is inherently present.

Alternatively, if applicants' can convince the examiner that such is not inherently present, then the examiner would rely upon applicants' acknowledged prior art discussion as found on pages 1-2 of the specification for disclosing such.

It would have been obvious to modify the base system of Maro et al with the above distance range disclosed, motivation is to provide for the proper focusing of the light beam upon the record medium in order to operate the system in the "near" field.

17. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 32 as stated above, and further in view of Yoshinari et al/JP 11-126387, e.g., see fig. 10.

The limitation of these claims, plurality of layers for the film is considered to be taught by the Yoshinari et al reference – see figure 3 and its description for instance.

It would have been obvious to one of ordinary skill in the art to modify the system of the prior art as relied upon with respect to the independent claim with the teaching from Yoshinari et al/JP 11-126387, motivation is to increase the heat dissipation/radiation ability by substituting/ modifying the single layer with a plurality of layers as taught by Yoshinari et al.

18. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 32 as stated above and further in view of Kikuchi et al.

The ability of having antireflection layers for their inherent use in this environment is known as taught by the Kikuchi et al reference.

It would have been obvious to one of ordinary skill in the art to modify the system of the JP document as relied upon as stated above with the teaching from Kikuchi et al, motivation is to save

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valuable resources by using existing antireflection layer abilities in this environment for their inherent uses.

19. Claims 45-50, 52, and 56-58 are rejected under 35 U.S.C. 102(e) as being anticipated by Maro et al.

Maro et al discloses a "near" field optical recording and reproducing system, having the appropriate optics and recording medium as presented in claim 45. Applicants' attention is drawn to figures 3-5 for instance.

With respect to the limitations of claim 46, note the passage at col. 2 lines 5-25.

With respect to claims 47-50, since the diamond like carbon is disclosed, all the limitations of claims 47-49 are inherently present.

With respect to claim 52, the metal layer is depicted.

With respect to claims 56-58, the various types of recording material are also disclosed.

20. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 45 as stated above, and further in view of Yoshinari et al/JP 11-126387.

The limitation of this claim, plurality of layers for the film is considered to be taught by the Yoshinari et al reference – see figure 3 and its description for instance or e.g., fig. 10 in the JP document.

It would have been obvious to one of ordinary skill in the art to modify the system of the prior art as relied upon with respect to the independent claim with the teaching from Yoshinari et al/JP document, motivation is to increase the heat dissipation/radiation ability by substituting/ modifying the single layer with a plurality of layers as taught by Yoshinari et al.

21. Claims 53 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 45 as stated above and further in view of Kikuchi et al.

The ability of having antireflection layers for their inherent use in this environment is known as taught by the Kikuchi et al reference.

It would have been obvious to one of ordinary skill in the art to modify the system of the Maro et al document as relied upon as stated above with the teaching from Kikuchi et al, motivation is to save

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valuable resources by using existing antireflection layer abilities in this environment for their inherent uses.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. It is noted that the JP 11-126387 document can be relied upon in combination with the above Maro et al document as forming a basis of rejection (under 103) with respect to claims 32-58.

It is also noted that Maro et al can be relied upon to reject claims 1,5-17,19-31.

Okubo and/or the section 12.1.3 from the book by Zvezdin and Kotov are cited as also illustrative of a reflective metal layer in the appropriate position is considered known as taught by figure 2 of the Okubo reference. Alternatively, the above noted section from the Zvezdin and Kotov book also teaches the use of such metal in this environment.

Yamaguchi et al ('092) and Yoshinari et al ('399) are cited as illustrative of near field recording abilities and phase changing recording materials in this environment.

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiries concerning missing papers/references, etc. must be directed to Group 2600 Customer Services at (703) 306-0377.

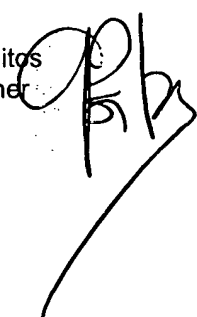
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Aristotelis M Psitos
Primary Examiner
Art Unit 2653



AMP
July 17, 2003